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EXAMINER	
SPIEGLER, ALEXANDER H	

ART UNIT	PAPER NUMBER
1637	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/034,870	SORGE, JOSEPH A.	
	Examin r	Art Unit	
	Alexander H. Spiegler	1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,6-9 and 11-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 6-9, and 11-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Status of the Application

1. This action is in response to Applicant's response, filed on October 28, 2003. Currently, claims 1, 6-9, and 11-26 are pending and are rejected. Claims 1, 6-8 and 11 have been amended, and claims 19-26 have been newly added. Claim 1 has been amended to include several analytical procedures (e.g., gel electrophoresis, anion-exchange chromatography, etc.), but has specifically excluded DNA sequencing and capillary electrophoresis from the list of possible analytical procedures encompassed by Claim 1. Claim 6 has been amended to recite, "wherein said substance is a restriction enzyme", which was not previously recited. Because of Applicant's amendments to the claims, new rejections necessitated by these amendments are contained herein. Accordingly, this action is made FINAL.

Any objections and rejections not reiterated below are hereby withdrawn. Specifically, the 102 rejections over Bauer, Yuan and Carmichael have been withdrawn, as well as, the 103 rejection of McKernan in view of Bauer, and Bauer in view of McClelland.

THE FOLLOWING ARE NEW GROUNDS OF REJECTION NECESSITATED BY APPLICANTS AMENDMENTS TO THE CLAIMS

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 7, 11-12 and 14-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Howley et al. (USPN 6,432,926).

Regarding Claims 1 and 7, Howley teaches a method of preparing a nucleic acid sample for an analytical procedure, said sample comprising template nucleic acid and synthetic nucleic acid, where said template and synthetic nucleic acid comprise DNA, said method comprising treating said sample with a substance that cleaves said template nucleic acid without substantially cleaving said synthetic nucleic acid, and subjecting said treated sample to an analytical procedure, wherein said analytical procedure is selected from the group consisting of gel electrophoresis and Southern blotting (see col. 30, lines 14-58).

Regarding Claim 11, Howley teaches the substance is DpnI (see col. 30, lines 32-33).

Regarding Claim 12, Howley teaches the restriction enzyme specifically cleaves nucleic acid comprising modified residues, without substantially cleaving un-modified residues (see col. 30, lines 32-50).

Regarding Claims 14-16, Howley teaches the template nucleic acid is double stranded, and the synthetic nucleic acid is single stranded (see col. 30, lines 32-36) (teaching that the sample DNA (i.e., template) is digested with XmnI to linearize the template DNA, but the synthetic DNA does not need to be digested with XmnI).

Regarding Claims 17-18, Howley teaches the double-stranded template is produced in cells which incorporate methylated adenine residues into DNA molecules, wherein the cell is a dam + bacterial cell (e.g., E. coli) (see col. 30, lines 32-35).

4. Claims 1, 7 and 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Dayn et al. (USPN 6,245,565).

Regarding Claims 1 and 7, Dayn teaches a method of preparing a nucleic acid sample for an analytical procedure, said sample comprising template nucleic acid and synthetic nucleic acid, where said template and synthetic nucleic acid comprise DNA, said method comprising treating said sample with a substance that cleaves said template nucleic acid without substantially cleaving said synthetic nucleic acid, and subjecting said treated sample to an analytical procedure, wherein said analytical procedure is selected from the group consisting of gel electrophoresis and Southern blotting (see col. 9, line 35 to col. 10, line 7).

Regarding Claim 11, Dayn teaches the substance is DpnI (see col. 9, lines 39-41).

Regarding Claim 12, Dayn teaches the restriction enzyme specifically cleaves nucleic acid comprising modified residues, without substantially cleaving un-modified residues (see col. 9, lines 40-45).

5. Claims 6, 9, 19 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Jeong et al. (J. Biochem. Mol. Biol. (1995) 28(6): 538-545).

Regarding Claims 6, 9 and 19, Jeong teaches a transcription reaction wherein a nucleic acid sample is generated comprising template nucleic acid and synthetic RNA, the improvement whereby after the transcription reaction and immediately prior to the analysis of the RNA sample, said nucleic acid sample is treated with a substance that cleaves the template nucleic acid

and does not substantially cleave the RNA, wherein said substance is a restriction enzyme (see page 539, col. 1 and page 541, col. 1) (teaching the treatment of the restriction enzyme DNase I cleaves the DNA template and does not substantially cleave the synthetic RNA).

Regarding Claims 23-24, it is an inherent property of transcription that the template DNA begins as a double stranded duplex DNA, wherein during transcription, the duplex is unwound and a single stranded synthetic RNA sequence is produced (see Lewin, B. Genes VI, Chapter 11, entitled "Transcription" on pages 287-295).

6. Claims 6, 9, 19 and 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Chung, H. (USPN 5,683,988).

Regarding Claims 6, 9 and 19, Chung teaches a transcription reaction wherein a nucleic acid sample is generated comprising template nucleic acid and synthetic RNA, the improvement whereby after the transcription reaction and immediately prior to the analysis of the RNA sample, said nucleic acid sample is treated with a substance that cleaves the template nucleic acid and does not substantially cleave the RNA, wherein said substance is a restriction enzyme (see col. 8, lines 12-43) (teaching the treatment of the restriction enzyme DNase I cleaves the DNA template and does not substantially cleave the synthetic RNA).

Regarding Claims 23-24, it is an inherent property of transcription that the template DNA begins as a double stranded duplex DNA, wherein during transcription, the duplex is unwound and a single stranded synthetic RNA sequence is produced (see Lewin, B. Genes VI, Chapter 11, entitled "Transcription" on pages 287-295).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1, 7-9, 11-12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. (USPN 5,789,166, previously cited), in view of Yuan (USPN 6,376,210, previously cited), in further view of Prober et al. (Science (1987) 238: 336-341).

Regarding Claims 1 and 7,

Bauer et al. teach a method for preparing a nucleic acid sample for an analytical procedure (mutagenesis), said method comprising treating said sample with a substance that cleaves said template nucleic acid without substantially cleaving said synthetic nucleic acid (cols. 9-10). Bauer teaches that following the digestion step; the mutagenized DNA (the prepared nucleic acid) is transformed (cols. 11 and 13-14). However, Bauer does not teach preparing the nucleic acid for an analytical procedure such as gel electrophoresis for use in

sequencing the prepared DNA (e.g., Bauer does not teach performing a sequencing reaction following transformation).

Yuan also teaches a method of mutagenesis, wherein after transforming the prepared nucleic acid, the transformed colonies are confirmed by sequencing (see col. 57, lines 31-32). Accordingly, Yuan teaches that it is advantageous to confirm the transformed colonies by sequencing.

Prober teaches sequencing using fluorescent chain-terminating dideoxynucleotides to produce DNA fragments, which are then, resolved using polyacrylamide gel electrophoresis (see abstract and pages 340-341). Specifically, Prober teaches using this sequencing strategy "results in simplified elution patterns and facilitates data analysis", as well as, providing a "rapid DNA sequencing system" (see page 340, col. 1 and page 341 col. 2, respectively). Accordingly, Prober teaches sequencing using fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis results in a simplified and more efficient method of sequencing.

Accordingly, in view of the teachings of Yuan and Prober, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Bauer so as to have carried out a sequencing reaction comprising the use of fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis, after transforming the prepared nucleic acid. One of ordinary skill in the art would have been motivated to modify the method of Bauer to have confirmed the identification of the prepared nucleic acid by sequencing using fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis, in order to have achieved the benefit of providing a more

efficient and more effective means of confirming the identification of the transformed colonies. That is, the skilled artisan would have been motivated to confirm the identification of the transformed colonies of Bauer, by sequencing, in order to confirm that the colonies actually contained the prepared nucleic acid sample. Prober teaches that such a sequencing reaction would have been advantageously carried out using fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis (see above).

Regarding Claims 8-9, Bauer teaches the synthesized nucleic acid can be synthesized in a linear amplification reaction, such as SSR, SDA, LCR, or any other linear cyclic amplification reaction (e.g., a sequencing reaction) (cols. 3-4).

Regarding Claim 11, Bauer teaches that the substances can be one of many possible restriction enzymes, such as DpnI, Nan II, NmuD I, NmuE I or need not be restriction enzymes, such as uracil N-glycosylase (cols. 9-10).

Regarding Claim 12, Bauer teaches the restriction enzyme specifically cleaves nucleic acid comprising modified residues, without substantially cleaving un-modified residues (cols. 3, 5, 7 and 9).

Regarding Claims 14-16, Bauer teaches the template nucleic acid is double stranded, and the synthetic nucleic acid is single stranded (see Figure 1, cols. 2-3 and 5-6, for example).

Regarding Claims 17-18, Bauer teaches the double-stranded template is produced in cells which incorporate methylated adenine residues into DNA molecules, wherein the cell is a dam + bacterial cell (e.g., E. coli) (see cols. 9-13). Specifically, Bauer teaches the methylation can comprise the use dam methylase in an E. coli cell (see col. 9, lines 46-60 and col. 12).

10. Claims 1, 7-8 and 11-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuan (USPN 6,376,210, previously cited), in view of Prober et al. (Science (1987) 238: 336-341).

Regarding Claims 1 and 7,

Yuan et al. teach a method for preparing a nucleic acid sample for an analytical procedure (mutagenesis), said method comprising treating said sample with a substance that cleaves said template nucleic acid without substantially cleaving said synthetic nucleic acid (cols. 56-57). Bauer teaches that following the digestion step; the mutagenized DNA (the prepared nucleic acid) is transformed, wherein the selected colonies (from the transformation), were confirmed by DNA sequencing (cols. 57). However, Yuan does not specify a method of sequencing.

However, Prober teaches sequencing using fluorescent chain-terminating dideoxynucleotides to produce DNA fragments, which are then, resolved using polyacrylamide gel electrophoresis (see abstract and pages 340-341). Specifically, Prober teaches using this sequencing strategy "results in simplified elution patterns and facilitates data analysis", as well as, providing a "rapid DNA sequencing system" (see page 340, col. 1 and page 341 col. 2, respectively). Thus, Prober teaches sequencing using fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis results in a simplified and more efficient method of sequencing.

Accordingly, in view of the teachings of Prober, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Yuan of confirming that the selected colonies, so as to have carried out a sequencing reaction

comprising the use of fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis. One of ordinary skill in the art would have been motivated to modify the method of Yuan to have confirmed the identification of the prepared nucleic acid by sequencing using fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis, in order to have achieved the benefit of providing a more efficient and more effective means of confirming the identification of the transformed colonies. That is, the skilled artisan would have been motivated to confirm the identification of the transformed colonies of Yuan, by sequencing using fluorescent chain-terminating dideoxynucleotides coupled with polyacrylamide gel electrophoresis, in order to have achieved a simplified, but more effective confirmation protocol.

Regarding Claim 8, Yuan teaches the synthesized nucleic acid can be synthesized in nucleic acid-based amplification reaction (PCR) (see col. 56).

Regarding Claim 11, Yuan teaches that the substance can be DpnI (cols. 56-7).

Regarding Claim 12, Yuan teaches the restriction enzyme specifically cleaves nucleic acid comprising modified residues, without substantially cleaving un-modified residues (col. 56).

Regarding Claims 14-16, Yuan teaches the template nucleic acid is double stranded, and the synthetic nucleic acid is single stranded (see col. 56). Yuan uses the ExSite PCR-based Site-Directed Mutagenesis Kit by Stratagene, which teaches the template is double stranded, and the synthetic nucleic acid is single stranded (See Stratagene Product info for the ExSite PCR-based Site-Directed Mutagenesis Kit).

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howley et al. (USPN 6,432,926) as applied to claims 1, 7, 11-12 and 14-18 above, and further in view of Sorge et al. (USPN 6,060,245).

The teachings of Howley are presented above. Specifically, Howley teaches analyzing a desired synthetic nucleic acid after cleavage of the template nucleic acid using Dpn I (which cleaves nucleic acid comprising modified residues, without substantially cleaving un-modified residues). Howley does not teach cleaving nucleic acid comprising un-modified residues, without substantially cleaving modified residues.

However, Sorge teaches generating or analyzing desired nucleic acid sequences by cleaving nucleic acids comprising modified residues, without substantially cleaving un-modified residues using specific adaptors (see abstract, cols. 12-19 and 26-37). Sorge teaches this method is advantageous because it provides a more efficient and effective method of generating or analyzing desired nucleic acids (see col. 5-6).

Accordingly, in view of the teachings of Sorge, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Howley so as to have cleaved the undesired nucleic acid without substantially cleaving un-modified residues. One of ordinary skill in the art would have been motivated to modify the method of Howley in order to have achieved the benefit of providing a more efficient and more effective means of generating or analyzing desired nucleic acids.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dayn et al. (USPN 6,245,565), as applied to claims 1, 7 and 11-12 above, and further in view of Sorge et al. (USPN 6,060,245).

The teachings of Dayn are presented above. Specifically, Dayn teaches analyzing a desired synthetic nucleic acid after cleavage of the template nucleic acid using Dpn I (which cleaves nucleic acid comprising modified residues, without substantially cleaving un-modified residues). Dayn does not teach cleaving nucleic acid comprising un-modified residues, without substantially cleaving modified residues.

However, Sorge teaches generating or analyzing desired nucleic acid sequences by cleaving nucleic acids comprising modified residues, without substantially cleaving un-modified residues using specific adaptors (see abstract, cols. 12-19 and 26-37). Sorge teaches this method is advantageous because it provides a more efficient and effective method of generating or analyzing desired nucleic acids (see col. 5-6).

Accordingly, in view of the teachings of Sorge, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Dayn so as to have cleaved the undesired nucleic acid without substantially cleaving un-modified residues. One of ordinary skill in the art would have been motivated to modify the method of Dayn in order to have achieved the benefit of providing a more efficient and more effective means of generating or analyzing desired nucleic acids.

13. Claims 20, 22 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung, H. (USPN 5,683,988), as applied to claims 6, 9, 19 and 23-24 above, and further in view of Bauer et al. (USPN 5,789,166).

The teachings of Chung are presented above. Specifically, Chung teaches an in vitro transcription reaction carried out using template DNA from transformed E. coli cells (e.g.,

HB101), wherein following the transcription reaction, the template DNA was cleaved by a restriction enzyme so that only the RNA would be analyzed (see col. 8, lines 12-24).

Gocke teaches that following a transcription-based reaction; the undesired DNA is removed by cleaving DNA with a restriction enzyme, which results in enriching the desired product (e.g., RNA in an in vitro transcription reaction) (see Figure 2 and col. 14). Accordingly, Gocke teaches that it is advantageous to degrade undesired DNA using restriction enzymes.

Bauer teaches the cleavage of parental DNA (undesired DNA) from transformed from dam + E. coli cells, wherein the cleavage is carried out with DpnI, which specifically cleaves nucleic acids comprising modified residues, without substantially cleaving un-modified residues (see cols. 9-13).

Accordingly, in view of the teachings of Gocke and Bauer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Chung so as to have used DpnI to cleave undesired DNA, in order to enrich the analysis of the desired RNA. One of ordinary skill in the art would have been motivated to modify the method of Chung in order to have achieved the benefit of enriching desired RNA following an in vitro transcription reaction where the DNA has been transformed in dam + E. coli cells.

With respect to Claim 22, Gocke teaches restriction enzymes can cleave double stranded nucleic acids, without substantially cleaving single stranded nucleic acids (col. 14).

14. Claim 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong et al. (J. Biochem. Mol. Biol. (1995) 28(6): 538-545), as applied to claims 6, 9, 19 and 23-24 above, and further in view of Sorge et al. (USPN 6,060,245).

The teachings of Jeong are presented above. Specifically, Jeong teaches performing an in vitro transcription reaction, and then cleaving the template DNA, but not substantially cleaving the synthetic RNA, thereby enriching the RNA for further analysis. Jeong does not teach cleaving template DNA comprising un-modified residues, without substantially cleaving modified residues.

However, Sorge teaches generating or analyzing desired nucleic acid sequences by cleaving nucleic acids comprising modified residues, without substantially cleaving un-modified residues using specific adaptors (see abstract, cols. 12-19 and 26-37). Sorge teaches this method is advantageous because it provides a more efficient and effective method of generating or analyzing desired nucleic acids (see col. 5-6).

Accordingly, in view of the teachings of Sorge, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Jeong so as to have cleaved the undesired nucleic acid without substantially cleaving un-modified residues. One of ordinary skill in the art would have been motivated to modify the method of Jeong in order to have achieved the benefit of providing a more efficient and more effective means of generating or analyzing desired nucleic acids.

15. Claim 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Chung, H. (USPN 5,683,988), as applied to claims 6, 9, 19 and 23-24 above, and further in view of Sorge et al. (USPN 6,060,245).

The teachings of Chung are presented above. Specifically, Chung teaches performing an in vitro transcription reaction, and then cleaving the template DNA, but not substantially cleaving the synthetic RNA, thereby enriching the RNA for further analysis. Chung does not

teach cleaving template DNA comprising un-modified residues, without substantially cleaving modified residues.

However, Sorge teaches generating or analyzing desired nucleic acid sequences by cleaving nucleic acids comprising modified residues, without substantially cleaving un-modified residues using specific adaptors (see abstract, cols. 12-19 and 26-37). Sorge teaches this method is advantageous because it provides a more efficient and effective method of generating or analyzing desired nucleic acids (see col. 5-6).

Accordingly, in view of the teachings of Sorge, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Chung so as to have cleaved the undesired nucleic acid without substantially cleaving un-modified residues. One of ordinary skill in the art would have been motivated to modify the method of Chung in order to have achieved the benefit of providing a more efficient and more effective means of generating or analyzing desired nucleic acids.

Conclusion

16. No claims are allowable.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander H. Spiegler whose telephone number is (571) 272-0788. The examiner can normally be reached on Monday through Friday, 7:00 AM to 3:30 PM.

If attempts to reach the examiner are unsuccessful, the primary examiner in charge of the prosecution of this case, Carla Myers, can be reached at (571) 272-0747. If attempts to reach Carla Myers are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (571) 272-0782. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Alexander H. Spiegler
January 29, 2004

CARLA J. MYERS
PRIMARY EXAMINER